## ABSTRACT OF THE DISCLOSURE

A process for producing a living radical polymer characterized in that a vinyl monomer is polymerized with use of an organotellurium compound represented by the formula (1), an azo type polymerization initiator and a ditelluride compound represented by the formula (2), and the living radical polymer obtainable by the process

$$R^2$$
 $T_e \longrightarrow R^1$ 
 $R^3$ 

wherein  $R^1$  is  $C_1$ - $C_8$  alkyl, aryl, substituted aryl or an aromatic heterocyclic group,  $R^2$  and  $R^3$  are each a hydrogen atom or  $C_1$ - $C_8$  alkyl, and  $R^4$  is aryl, substituted aryl, an aromatic heterocyclic group, acyl, oxycarbonyl or cyano.

$$(R^1Te)_2 (2)$$

15 wherein R<sup>1</sup> is the same as above.